LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Previously Presented)

An arrangement for allowing disengagement of a gear of a gearbox in a vehicle, wherein the vehicle includes an engine at least one powered wheel, a gearbox, and a driveline including a first driveline portion which extends from the engine, a second driveline portion which extends to the at least one powered wheel of the vehicle, and a specific element of the driveline between the first and the second portions,

the specific element being adapted to allow elastic rotation between the first and the second driveline portions when driving torque is being transmitted in the driveline; said arrangement comprising:

a first sensor operable to detect a position (P_1) of the first portion of the driveline, and a second sensor operable to detect a position (P_2) of the second portion of the driveline;

a control unit operable to store at least one measured value which is related to a reference angle (A_{REF}) between the position ($P_{1,\ REF}$) of the first portion and the position ($P_{2,\ REF}$) of the second portion when a gear is engaged in the gearbox, and is operable to initiate a control action so that said reference angle (A_{REF}) and a prevailing angle (A) between the first portion and the second portion are substantially equalized before the gear is disengaged.

Claim 2 (Previously Presented)

An arrangement according to claim 1, further comprising a clutch in the driveline, and the specific element is incorporated in the clutch.

Claim 3 (Previously Presented)

An arrangement according to claim 2, wherein the specific element comprises a clutch disc of the clutch, the clutch disc includes a hub connected to one of the first and second portions

of the driveline and a peripheral portion of the disc around the hub, the clutch disc being operable to allow elastic rotation between the hub and the peripheral portion of the clutch disc.

Claim 4 (Previously Presented)

An arrangement according to claim 1, wherein the specific element allows elastic rotation of at least ± 8°.

Claim 5 (Previously Presented)

An arrangement according to claim 1, further comprising a flywheel on the first portion of the driveline and rotatable therewith; the first sensor is operable to detect a first parameter which is related to a rotational position of the flywheel.

Claim 6 (Previously Presented)

An arrangement according to claim 1, wherein the first sensor is operable to detect a speed of the engine.

Claim 7 (Previously Presented)

An arrangement according claim 1, further comprising an output shaft from the gearbox, the output shaft being in the second portion of the driveline, and the second sensor is operable to detect a second parameter which is related to a rotational position of the output shaft of the gearbox.

Claim 8 (Previously Presented)

An arrangement according to claim 1, wherein the second sensor is operable to detect a speed of the vehicle.

Claim 9 (Previously Presented)

An arrangement according to claim 1, wherein the control unit is operable to initiate control of an output torque of the engine for substantially equalizing the prevailing angle (A) and

the reference angle (A_{REF}) between the first and the second driveline portions before said gear is disengaged at the gearbox.

Claim 10 (Previously Presented)

An arrangement according to claim 1, further comprising a gearchange mechanism in the gearbox; the control unit is operable to activate the gearchange mechanism for disengaging the gear when the prevailing angle (A) and the reference angle (A_{REF}) between the first and the second portions have been substantially equalized.

Claim 11 (Previously Presented)

A method for allowing disengagement of a gear in a gearbox of a vehicle, wherein the vehicle includes an engine, the gearbox, a driveline having a first portion which extends from the engine to a specific element of the driveline, and a second portion which extends from the element to at least one powered wheel of the vehicle, and the specific element is adapted to allow elastic rotation between the first and the second portions of the driveline when driving torque is being transmitted in the driveline, the method comprising:

detecting a position (P_1) of the first portion of the driveline, and detecting a position (P_2) of the second portion of the driveline;

storing at least one measured value which is related to a reference angle (A_{REF}) between the position ($P_{1,\ REF}$) of the first driveline portion and the position ($P_{2,\ REF}$) of the second driveline portion when the gear is engaged in the gearbox, and for initiating a control action so that the reference angle (A_{REF}) and a prevailing angle (A) between the first and the second driveline portions are substantially equalized before the gear is disengaged.

Claim 12 (Previously Presented)

A method according to claim 11, wherein the first portion of the driveline has a flywheel, and the method further comprises detecting a first parameter of the first portion (P_1) which is related to a rotational position of the flywheel.

Claim 13 (Previously Presented)

A method according to claim 11 wherein the gearbox has an output shaft in the second portion of the driveline, and the method further comprises detecting a second parameter of the position (P_2) which is related to a rotational position of the output shaft of the gearbox.

Claim 14 (Previously Presented)

A method according to claim 11, further comprising controlling an output torque of the engine for substantially equalizing the prevailing angle (A) and the reference angle (A_{REF}) between the first and the second driveline portions before the gear is disengaged.

Claim 15 (Previously Presented)

A method according to claim 11, further comprising activating a gearchange mechanism for disengaging the gear when the prevailing angle (A) and the reference angle (A_{REF}) between the first and the second driveline portions have been substantially equalized.

Claim 16 (Previously Presented)

An arrangement according to claim 1, further comprising a first component of the first portion of the driveline, and the first sensor is operable to detect the first component; and a second component of the second portion of the driveline and the second sensor is operable to detect the second component.

Claim 17 (Previously Presented)

An arrangement according to claim 9, further comprising a gearchange mechanism in the gearbox; the control unit is operable to activate the gearchange mechanism for disengaging the gear when the mutual angle (A_{REF}) between the first and the second portions has been substantially equalized.

Claim 18 (Previously Presented)

A method according to claim 11, wherein the first portion of the driveline has a first component and the second portion of the driveline has a second component; and

detecting the position (P1) of the first portion of the driveline comprises detecting a position of the first component, and detecting the position (P2) of the second portion of the driveline comprises detecting a position of the second component.

Claim 19 (Previously Presented)

A method according to claim 12, wherein the gearbox has an output shaft in the second portion of the driveline, and the method further comprises detecting a second parameter of the second portion (P_2) which is related to a rotational position of the output shaft of the gearbox.

Claim 20 (Previously Presented)

A method according to claim 14, further comprising activating a gearchange mechanism for disengaging the gear when the reference angle (A_{REF}) and the prevailing angle (A) between the first and the second driveline portions have been substantially equalized.